

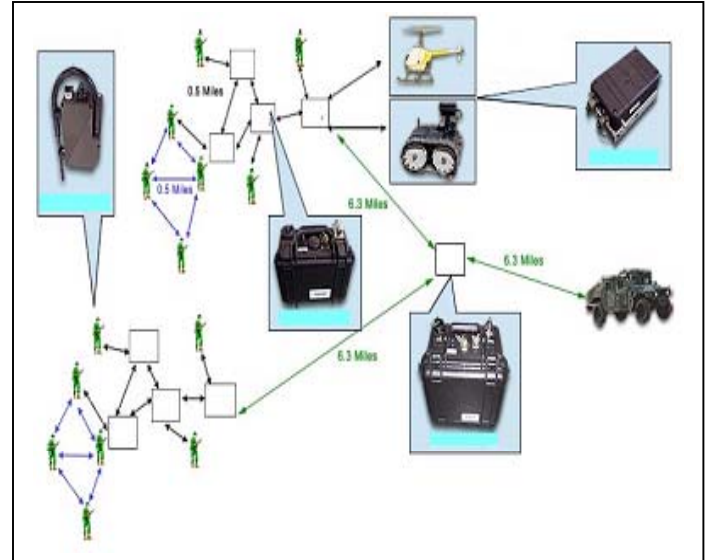
Company and Below Wireless Network Infrastructure and Management

Purpose: In conjunction with other initiatives, this initiative will provide the backbone to bring robust, secure voice and data to the bandwidth-disadvantaged warfighter.

Background: While investigating the technologies available to increase the range of the cellular initiative, mobile ad-hoc networks showed to be the best possibility. Such networks tend to be extremely lightweight for those placing the network nodes where they are needed. Wireless Fidelity (WiFi) also offers the best opportunity to bring real information down to the lowest tactical level.

Description: Design and build a secure, managed, mobile ad hoc wireless network in order to provide critical information for small unit leaders. This initiative will develop and test radios that provide voice and data communications to disadvantaged tactical users.

At the company and below, lightweight command and control mostly consists of small voice radios. Using current Commercial Off The Shelf technologies that bring WiFi capabilities into cellular handsets, it is possible to harness the capability and disposability of communications devices that are taken for granted in garrison and bringing them to the battlefield. This initiative provides the communications pipe that will enable this information exchange.



Deliverable Products: A “best of breed” that extends the range and reduces the footprint of current systems is the main deliverable. In conjunction with that deliverable, the network will be an integral part of the TACCELL network.

Milestones:

TASK	FY06	FY07	FY08
Identify & Evaluate	▲	▲	
Prototype development; voice and data		▲	▲
LTA 1, 2, 3	▲	▲	▲
Distributed Operations			▲

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